

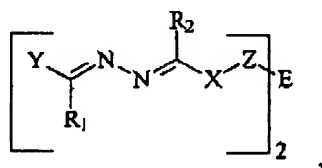
Application No. 10/613,971

AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or less characters; and 2. added matter is shown by underlining.

1. (Original) An organophotoreceptor comprising at least one photoconductive element comprising an electrically conductive substrate and a photoconductive element on the electrically conductive substrate, the photoconductive element comprising:

(a) a charge transport compound having the formula:



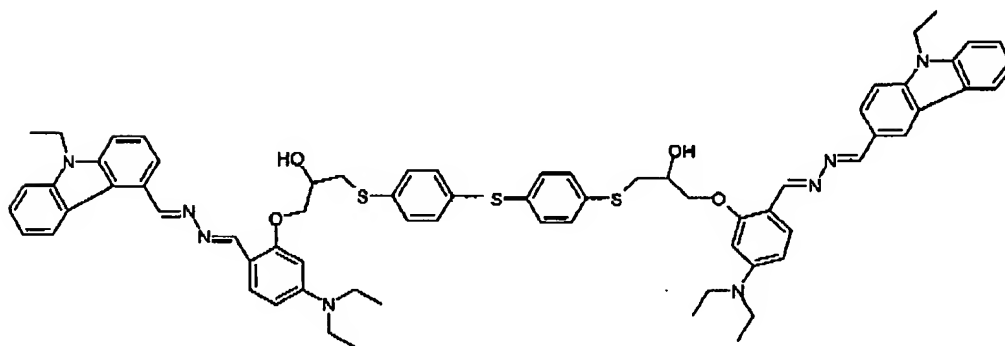
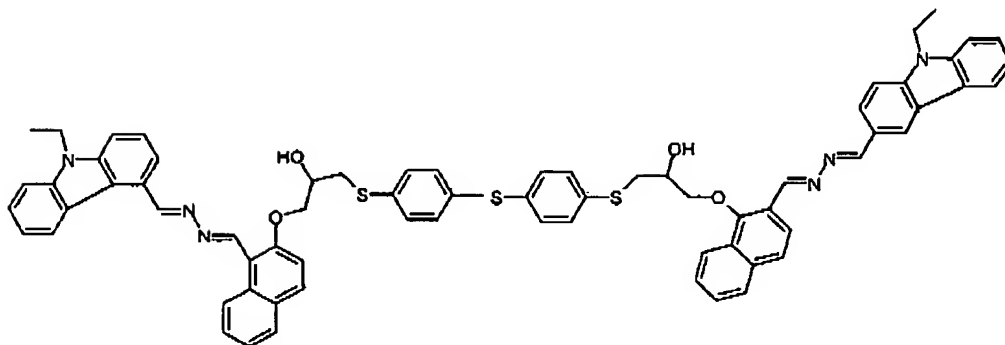
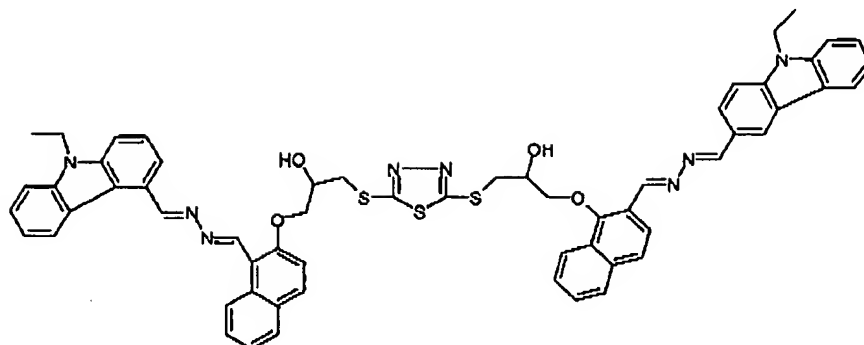
where R_1 and R_2 are, independently, hydrogen, an alkyl group, an alkaryl group or an aryl group; X is an aromatic group; Y is an (N,N-disubstituted)arylamine; Z is $(\text{CH}_2)_m$ group where m is an integer between 0 and 30 where one or more of the methylene groups is optionally replaced by O, S, C=O, O=C-O, O=C-NR₃, sulfoxide, sulfate, phosphate, an aryl group, urethane, urea, NR₄ group, CHR₅ group, or CR₆R₇ group where R₃, R₄, R₅, R₆, and R₇ are, independently, H, hydroxyl, thiol, an amine group, an alkyl group, an alkaryl group, a heterocyclic group, or an aryl group, and E is a bond, O, S, C=O, NR₈, CR₉R₁₀ group, a heterocyclic group, or an aromatic group where R₈, R₉, and R₁₀ are, independently, H, an alkyl group, an alkaryl group, or an aryl group; and

(b) a charge generating compound.

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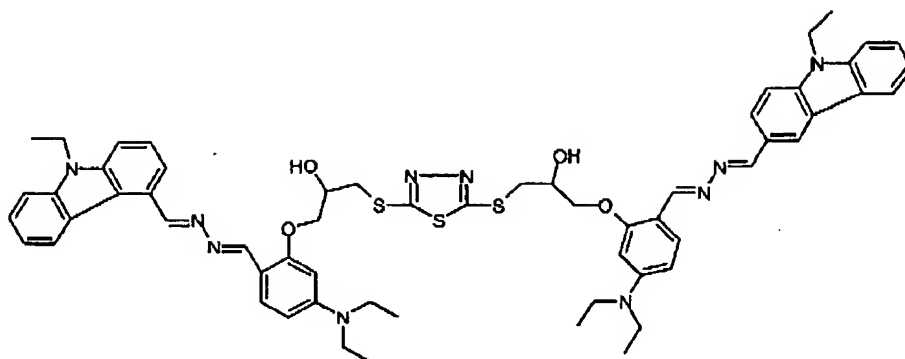
2. (Original) An organophotoreceptor according to claim 1 wherein Y is a carbazole group.
3. (Original) An organophotoreceptor according to claim 1 wherein X is selected from the group consisting of phenylene group, naphthalene group, and (N,N-disubstituted)aminophenylene group.
4. (Original) An organophotoreceptor according to claim 1 wherein Z is $(CH_2)_m$ and $m=3$, and one methylene group is replaced by CHOH.
5. (Original) An organophotoreceptor according to claim 1 wherein Z is $(CH_2)_m$ and $m=4$, with one methylene replaced by CHOH and one methylene is replaced by -O-.
6. (Original) An organophotoreceptor according to claim 1 wherein Z is $(CH_2)_m$ and $m=5$, with one methylene replaced by CHOH, one methylene is replaced by -O- and one methylene is replaced by -S-.
7. (Original) An organophotoreceptor according to claim 1 wherein E is an aromatic group.
8. (Original) An organophotoreceptor according to claim 7 wherein the aromatic group is thiadiazolyl group.
9. (Original) An organophotoreceptor according to claim 7 wherein the aromatic group is a thiobisbenzenethiol group.
10. (Original) An organophotoreceptor according to claim 1 wherein the charge transport compound has a formula selected from the group consisting of the following:

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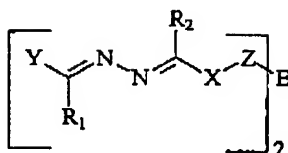
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11. (Original) An organophotoreceptor according to claim 1 wherein the photoconductive element further comprises an electron transport compound.
12. (Original) An organophotoreceptor according to claim 1 wherein the photoconductive element further comprises a binder.
13. (Original) An electrophotographic imaging apparatus comprising:
- (a) a light imaging component; and
 - (b) an organophotoreceptor oriented to receive light from the light imaging component, the organophotoreceptor comprising an electrically conductive substrate and a photoconductive element on the electrically conductive substrate, the photoconductive element comprising
 - (i) a charge transport compound having the formula

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where R_1 and R_2 are, independently, hydrogen, an alkyl group, an alkaryl group or an aryl group; X is an aromatic group; Y is an (N,N-disubstituted)arylamine; Z is $(CH_2)_m$ group where m is an integer between 0 and 30 where one or more of the methylene groups is optionally replaced by O, S, C=O, O=C-O, O=C-NR₃, sulfoxide, sulfate, phosphate, an aryl group, urethane, urea, NR₄ group, CHR₅ group, or CR₆R₇ group where R_3 , R_4 , R_5 , R_6 , and R_7 are, independently, H, hydroxyl, thiol, an amine group, an alkyl group, an alkaryl group, a heterocyclic group, or an aryl group, and E is a bond, O, S, C=O, NR₈, CR₉R₁₀ group, a heterocyclic group, or an aromatic group where R_8 , R_9 , and R_{10} are, independently, H, an alkyl group, an alkaryl group, or an aryl group; and

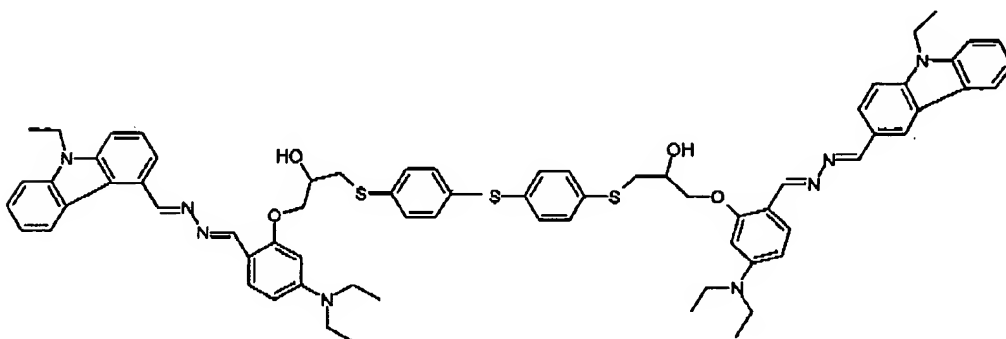
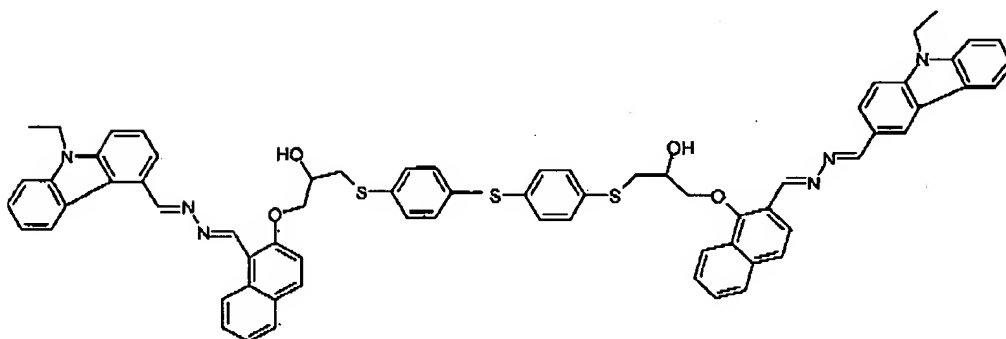
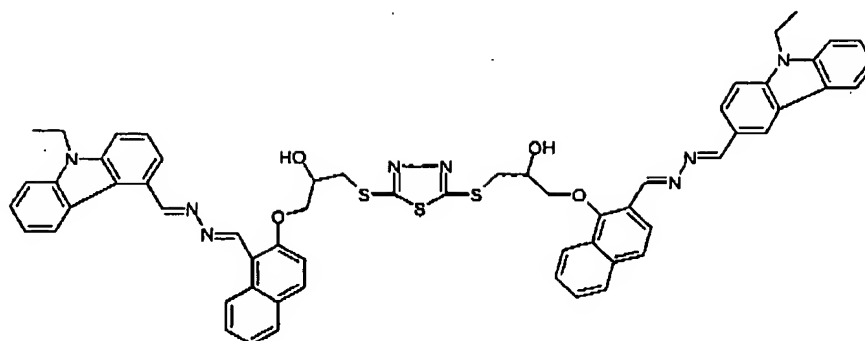
(ii) a charge generating compound.

14. (Original) An electrophotographic imaging apparatus according to claim 13 wherein Y is a carbazole group.

15. (Original) An organophotographic imaging apparatus according to claim 13 wherein X is selected from the group consisting of a phenylene group, naphthalene group, and (N,N-disubstituted)aminophenylene group, $m=3$ and one of the (CH_2) groups is replaced by CHOH, and E is an aromatic group selected from the group consisting of thiadiazolyl group and thiobenzene group.

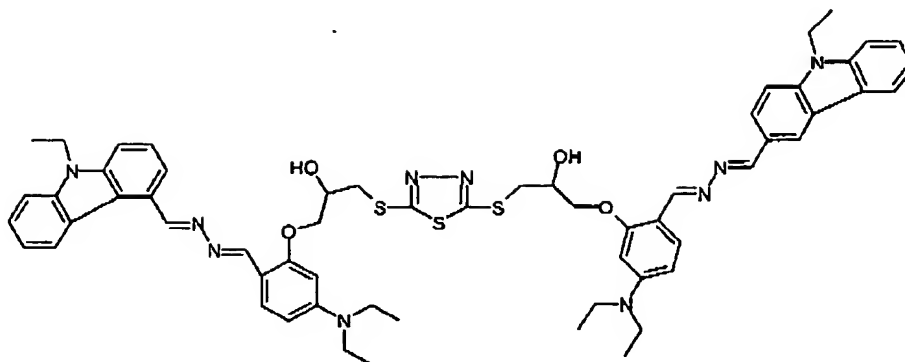
16. (Original) An electrophotographic imaging apparatus according to claim 13, wherein the charge transport compound has a formula selected from the group consisting of the following:

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17. (Original) An electrophotographic imaging apparatus according to claim 13 wherein the photoconductive element further comprises an electron transport compound.

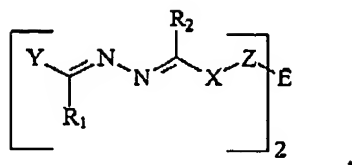
18. (Original) An electrophotographic imaging apparatus according to claim 13 wherein at least one photoconductive element further comprises a binder.

19. (Original) An electrophotographic imaging apparatus according to claim 13 further comprising a liquid toner dispenser.

20-26 (Canceled)

27. (Original) A charge transport compound having the formula

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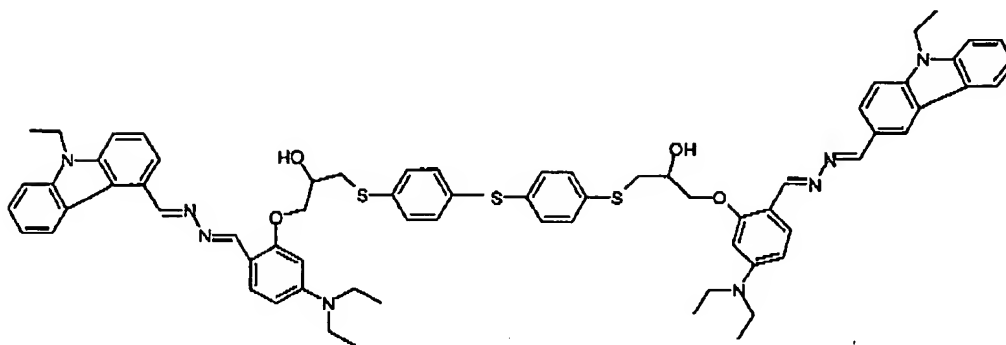
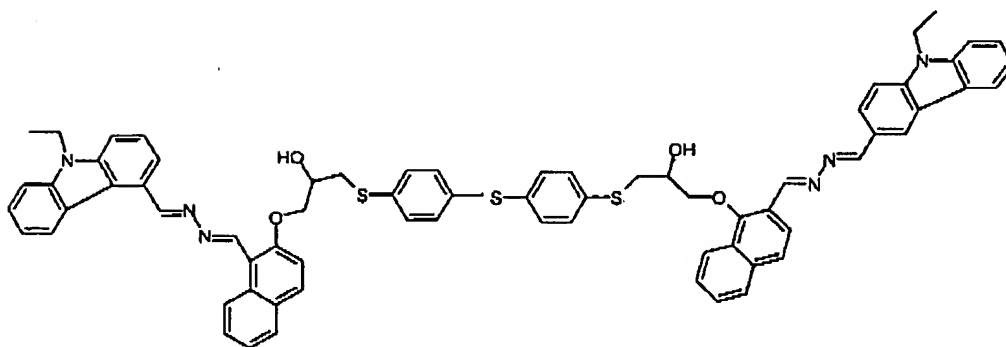
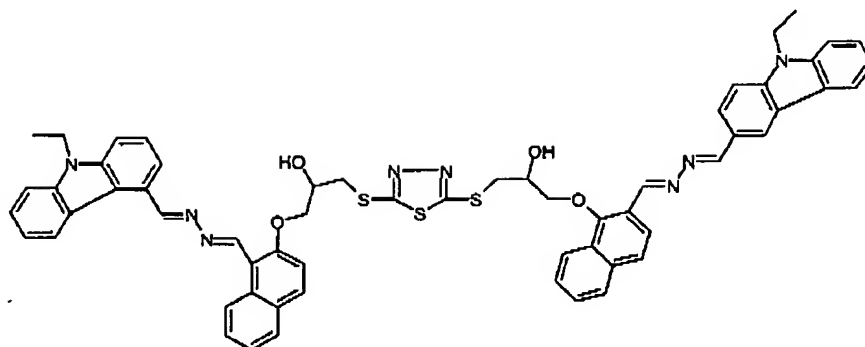
where R_1 and R_2 are, independently, hydrogen, an alkyl group, an alkaryl group or an aryl group; X is an aromatic group; Y is an (N,N-disubstituted)arylamine; Z is $(CH_2)_m$ group where m is an integer between 0 and 30 where one or more of the methylene groups is optionally replaced by O, S, C=O, O=C-O, O=C-NR₃, sulfoxide, sulfate, phosphate, an aryl group, urethane, urea, NR₄ group, CHR₅ group, or CR₆R₇ group where R_3 , R_4 , R_5 , R_6 , and R_7 are, independently, H, hydroxyl, thiol, an amine group, an alkyl group, an alkaryl group, a heterocyclic group, or an aryl group, and E is a bond, O, S, C=O, NR₈, CR₉R₁₀ group, a heterocyclic group, or an aromatic group where R_8 , R_9 , and R_{10} are, independently, H, an alkyl group, an alkaryl group, or an aryl group.

28. (Original) A charge transport compound according to claim 27 wherein Y is a carbazole group.

29. (Original) A charge transport compound according to claim 27 wherein X is selected from the group consisting of phenylene group, naphthalene group, and (N,N-disubstituted)aminophenylene group, $m=3$ and one of the (CH_2) groups is replaced by CHOH, and E is an aromatic group selected from the group consisting of thiadiazolyl group and thiobenzene group.

30. (Original) A charge transport compound according to claim 27 wherein the charge transport compound has a formula selected from the group consisting of the following:

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